

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 01:56:16 1994
From: haynes@cats.ucsc.edu (Jim Haynes)
Date: Thu, 20 Oct 1994 21:12:55 -0700
Message-Id: <199410210412.VAA22417@hobbes.UCSC.EDU>
Subject: Re: Don't discount the Windom

Don Merz wrote:

>have missed it and want to make sure it gets back up before winter. The
>other pre-winter project is getting the BC-325 out of the garage and into the
sack
>(basement). Anybody want to come over and help push 900 pounds of transmitter
>around?

Wow! a BC-325! That sure brings back memories. When I first headed off to collitch in about 1955 at the University of Arkansas and W5YM I was greeted by "the big rig", a BC-325. It was about six feet tall, meters and knobs all over the place, and I'm sure Don is right about the 900 pounds part. I'll leave it to Don to describe the beast - his having it at hand is a lot better than my foggy memory, I'm sure. At the time we had a Zepp running between two corners of the Engineering Building, with the open-wire-line feeders coming through a sheet of Plexiglas that replaced a window pane. The rig had originally been truck mounted. I guess it was in some sense the predecessor to the BC-610. Nice material - doors of 3/16" sheet aluminum.

I added FSK to the thing and ran it almost every night on RTTY. In those days we rarely got above 40 meters with RTTY because receivers and transmitters drifted so much. I remember tearing into it one night and taking something like 18" of excess lead length out of the final so we could operate on 20M with somewhat fewer parasitics than before.

About the last semester I was there the ham station got booted out of the third floor lab and moved to a little mezzanine over the first floor power lab. I don't remember if the BC-325 made the trip; and if it did I certainly don't remember how it got moved down three floors and back up to the mezzanine. I guess it got cannibalized for parts soon after I graduated. One project we were going to do, and never got around to, was convert it to plate modulated AM. The thing was that class B plate modulation had been invented by Loy Barton when he was at U of Ark, and we still had his modulation transformer, so in those waning days of AM phone we wanted to let his transformer talk again. Alas, I've heard from the present club there that the transformer cannot be found anymore, much as they would like to find it.

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 15:03:32 1994
Date: Fri, 21 Oct 94 16:52:51 GMT
From: Hugh D. Stegman <driver8@red-eft.la.ca.us>
Message-Id: <9410211652.AA14233@red-eft.la.ca.us>

Subject: Re: HF CW procedures

Jeff, you'd probably know this. Why do the maritime coastal stations say "UP" when they're ready to listen for the ship? Are they tuning up from the suggested working freq in case it's busy?

Thanks.

Hugh NV6H

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 16:34:14 1994
Date: Fri, 21 Oct 1994 14:22:41 -0400
From: JosephWP@aol.com
Message-Id: <9410211422408288155@aol.com>
Subject: HQ-215 Question

Does anyone know what changes were made in the Mark II version of the HQ-215? I am interested in learning both about the problems which Hammarlund sought to fix in the second effort, and exactly what was done to attempt to correct them.

Joseph Pinner +
Lafayette, LA
KC5IJD

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 20:35:20 1994
Date: Fri, 21 Oct 94 21:55:06 UTC
Message-Id: <2631@ki5sl.ampr.org>
From: ki5sl@ki5sl.ampr.org (Rick_Blank)
Subject: Re: HQ-215 Question

Joseph, I read in one of the magazines or newsletters that even the folks at Hammarlund didn't think much of the radio...maybe it was in "Electric Radio"? What I do remember about the article was that they were talking about the last of the Hammarlund-EAC inventory and a statement was made about one of the 215's being on a desk at the warehouse...I hope maybe this points you in some direction toward finding the answer!

There is an advertisement in "ER" about Hammarlund NOS parts, etc., have you tried them and seen if they have a copy of the 215 MkII book to compare schematics? they probably made semiconductor and minor circuit changes, but, I am only guessing.

Let us on the BA group know what you find out.

Rick Blank, KI5SL
ki5sl@sat.ampr.org
2223 Blanco Road
San Antonio, Texas 78212
end

From owner-boatanchors@gnu.ai.mit.edu Sat Oct 22 02:08:11 1994
Date: Sat, 22 Oct 1994 00:52:47 -0400 (EDT)
From: DUBE2@delphi.com
Subject: Ladder line
Message-Id: <01HIK3TDUXAW936N0E@delphi.com>

<.....TV receiving type twin lead is the worst>

No wonder I didn't have much luck when I set up my first Novice station! I used a 40-meter doublet made of TV twinlead! But it was really simple and cheap-cheap-cheap.

73,
Dube Todd AB5AP <dube2@delphi.com"

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 00:46:40 1994
From: bamodena@csemail
Message-Id: <9410202352.AA100711@csemail.cropsci.ncsu.edu>
Subject: Re: Ladder Line noise pickup?
Date: Thu, 20 Oct 94 19:52:33 EDT

Though much of the conversation centers on TRANSMIT...one is often using the same antenna system for receive.

Several of my antenna systems have a run of 300 ohm transmitting twinlead.

I make it a practise to twirl the twinlead (about one turn per foot) specifically to "balance" the lead-in against noise pick up on receive via what I think would be regarded as "crosstalk" between a local noise source and one of the two conductors always "being closer" than the other...given that *receivers* are pretty danged sensitive to low voltage signals. :^)

With respect to whether coax is an efficient shielde against noise, consider this:

"Stray pickup from an improperly shielded feed-line system can upset all the directional characteristics of an otherwise properly operating Beverage antenna system [might be true of a yagi, too]...It is important..to use well shielded coax in order to have a quiet feed system under all

circumstances and on all frequencies. The author [ON4UN] has been using double-shielded RG-214 (same size as RG-8 or RG-213, but with two densely woven copper shields).... It is advisable to bury the coaxial cables a few inches below the ground to further reduce stray pickup via the coax shield...After installing the feed lines, try to receive signals with the coax connected to the receiver, with both the coax end open and then with it terminated in the resistor equal to the characteristic impedance of the cable....

Taken from "Low Band DX-ing", by John Devoldere, ARRL, 1987.

I'll bet that a dummy load terminated feedline system that can receive, can probably also radiate on transmit. :^)

--

73/Steve/AB4EL ab4el@Cybernetics.NET

--

73 Steve AB4EL ab4el@Cybernetics.NET

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 17:52:28 1994
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Ladder Line vs. Noise
Date: Fri, 21 Oct 94 15:41 CDT
Message-Id: <EALF4048.EALF4105@mail.admin.wisc.edu>

to: boatanchors@gnu.ai.mit.edu

Greetings, Troops!

Re. theoretical self shielding capabilities of ladder line:

This is one of those areas where theory falls apart when put into practice.

The theory says that it IS self shielding, BUT this theory also says that this is ONLY true when the external noise is (A) of equal AMPLITUDE in both wires, and (B) of equal PHASE in both wires. If any imbalance in either parameter exists, the nulling effect will take place BUT it won't be complete, and what's left over will still show up in the receiver.

In a more practical example:

I'm heavily into HF utility DXing. This particular game requires the use of computerized digital demods for reading RTTY, FAX, the various FEC modes, etc.

Even tho these critters are (nowadays, at least) designed for use in the shack around sensitive receivers (filtering and shielding like you wouldn't believe), they STILL emit some pretty horrendous garbage from time base oscillators etc. as well as broadband hash from digital switching chips, both from the power line and thru the case or case openings. The older ones, especially those based on the old Radio Shack CoCo, are particularly bad; with that one in particular I've seen feedback situations where the computer actually generates a signal that sounds like an FSK Teletype signal, and if you tune to it the system will proceed to print out it's own garbage, generating MORE of it to be printed in the process!

Until fairly recently I was an urban cliff dweller, living in apartments and using improvised antennas (usually a random wire with an unshielded lead-in). Obviously, this setup was made to order for noise pickup! Changing to systems which were balanced improvizations fed with balanced line (usually 300 ohm twin lead), the results were no better at all; so much for self shielding! The only cure in this particular situation was to use a shielded computer twisted pair cable (Twinax). THAT was finally the cure, almost; even with Twinax, the situation was such that the antenna itself couldn't be moved far enough away from the decoder to prevent direct pickup. Even with this problem however, the system became workable.

Since moving into my own home, and experimenting with the T2FD antenna, I had the experience of bringing a 450 ohm ladder line directly into the shack on a temporary basis while the T2FD was being experimented with and optimized. A short period of diddling around with it occurred at that time, using it tied directly to a Tech Material Corp. GPR-90, and later to the R-390A.

Under these conditions (antenna presenting a balanced load, and going to balanced receiver inputs), the self shielding properties of balanced feedlines SHOULD have been at thier maximum. The Color Computer demod was LONG gone by now, replaced by a professional grade demod, the Universal M-7000. The noise output of this one compared to the CoCo is minuscule.

As soon as it was turned on, the receiver was unusable. The closest the feedline came to the receiver was about 8 feet.

73's,

Tom "Mr. T." Adams, K9TA

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 10:02:06 1994
Date: Fri, 21 Oct 1994 09:15:26 -0500
From: CCS_MAH@ADMIN.FANDM.EDU (Mark Hemlick Ph. D.)
Subject: Ladder line: corrections
Message-Id: <01HIJ72MV5EQA9M0U1@ACAD.FANDM.EDU>

OOOPS! I'd like to make two corrections to my previous posts about ladder line.

First:

>So, for example take a 600 ohm feedline, with 6 in. (.15 m) spacing at 14
>mhz with a current of 1 amp (i.e. power 600 W) (from Moxon, page 55):
>
>0.09 W=160(pi/134)**2
>
>Nine milliwatts of feedline radiation.

Obviously, this should be Ninety milliwatts.

Secondly:

>5. Detune the feedline for antenna currents by choosing a length that is
>not resonant with the desired operating frequency. 39, 58, 96, 109 and 145
>ft are good lengths for all bands with the possible exception of 160, 30,
>17, and 12 meters.

These lengths include both the feedline and one leg of the dipole. So, if your dipole is 100 feet long and each leg is 50 feet, then one possible feedline length would be: 96-50=46 feet. Those of you with an ARRL antenna book will recognize these figures from the chart in the "Transmission Line" chapter.

Sorry for any confusion.

Best wishes to all.

Mark KA3LFG

From owner-boatanchors@gnu.ai.mit.edu Sat Oct 22 02:38:26 1994
Date: Sat, 22 Oct 1994 01:23:56 -0400 (EDT)
From: DUBE2@delphi.com
Subject: Lost mail
Message-Id: <01HIK4YMMY82936N0E@delphi.com>

Someone sent me mail in the last few days and I accidentally deleted it.
Please re-send it. Sorry for the inconvenience.

73,
Dube Todd AB5AP <dube2@delphi.com>

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 12:26:05 1994
From: "Mark Glusker" <glusk@mechcad3.esd.sgi.com>
Message-Id: <9410210836.ZM5578@mechcad3.esd.sgi.com>

Date: Fri, 21 Oct 1994 08:36:22 -0700
Subject: NC101X and SX42 Speakers Wanted

I am looking for the following speakers:

Hallcrafters R-42 (for the SX-42 and SX-62)

National (for the HRO and NC-101X) model number?
approximately 10" square, a circular grille with three
vertical bars and the NC diamond towards the top of the
center bar, black wrinkle finish

Thanks,

Mark Glusker, glusk@esd.sgi.com

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 11:31:39 1994
Date: Fri, 21 Oct 94 07:36:03 PST
From: janderson@polycom.com
Message-ID: <9409217827.AA782750163@ccsmpgw.polycom.com>
Subject: R-390A bug question

The AGC in my R-390A is acting up, and I wanted to see if anyone here might have some thoughts concerning this problem.

I first noticed this two nights ago while trying to listen to SW broadcast on 31 meters - I was getting a lot of distortion which I could eliminate by backing down on the RF gain. I've never had to do this in the past, and I also noticed that the amount of distortion when the RF gain was cranked up was about the same whether or not it was in AGC or MGC mode.

I pulled the receiver out of the rack and put it on the test bench. When a very loud station (local AM) is tuned in, there is a LOT of distortion, and the AGC voltage on the back panel only reads about -2.5 volts.

Interestingly, this problem is intermittent. Sometimes (rarely) the receiver sounds great - the back panel AGC voltage in this case is -7.5 V (with the same loud local AM station). Much better, but if I turn the AGC Time switch from MED to SLOW, and then back again (after waiting, say, 10 seconds), the AGC voltage goes to -2.5 volts and NEVER RECOVERS back to -7.5, even if I power down and wait for a long long time! (Note: The switch is OK).

However, the receiver seldom powers up in a "good" mode, so I

can't verify if this MED-SLOW-MED is a valid clue, or just a red herring.

If I break the AGC feedback loop by removing the shorting bar on the back panel, I can get the receiver to sound fine by applying about -8 to -10 VDC to pin 4 of the terminal strip. Also, the AGC voltage (open loop) developed by the AGC detector is -34 volts when measured at the back panel (pin 3 - again, with the AM station tuned in).

So it seems that something is screwed up in the AGC loop, but I don't know what. I've done the simple things, such as swap tubes, but the problem is still there. Has anyone seen this before, or have any ideas? It SEEMS to be a problem with the closed-loop gain of the AGC loop, and feedback loop problems can be a royal pain to solve!

Any help welcome!

- Jeff, WA6AHL

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 06:31:48 1994
From: vancleef@netcom.com (Henry van Cleef)
Message-ID: <199410210753.AAA02001@netcom4.netcom.com>
Subject: RME-45
Date: Fri, 21 Oct 1994 00:53:12 -0700 (PDT)

Last week I picked up an RME radio that was billed as "rough," but is all there. This radio is a real odd-ball.

1. It is a rackmount unit. The conversion is very neat---either a factory job, or done by someone with access to the same type of equipment that the factory had. The panel is grey, with silkscreen lettering, and does not have the separate plates that RME used under the control and S-meter mountings.
2. The radio was originally built with some major circuit changes to the standard RME-45. It got it with an RME-45 book that has the circuit change information neatly drawn in pencil on the edge of the schematic. The radio has a VR-150-30 added to the oscillator plate circuit, and a different and switchable noise limiter. The wiring for both of these is laced in the harness, and a close examination of components and standoff hardware shows no signs of any modification after the set was built---all the stuff came out of the same parts bins and appears to have been installed when the set was built. The VR-tube socket is installed in a keyed punched hole, using the same series of Amphenol sockets used for the other tubes. It does not have two-speed tuning or a calibrated bandspread, just the standard RME-45 logging scale.

My hunch is that I have a factory-built prototype of some sort. So far

as I know, RME did not make a rackmount as a product. Can anyone shed some light on this? There is no nameplate anywhere, although I can see that there once was a decal on the top of the chassis, now missing. Stamped on the rear apron in metal stamp characters is "V F 114" which I assume is a serial number. I have not been able to find anything with a reliable date code, but have only just begun to work on the thing.

It's got its share of problems, and replacing the petrified line cord is only the beginning. All the electrolytics are open, and the power supply bleeder wirewound is open in both sections (not too astounding---they were putting 10 watts through a 10 watt resistor). All of the composition resistors I've checked are right on value, though I don't yet know the condition of the paper "condensers." The thing is all there, so I imagine that with some TLC (starting with a good bath---it's filthy on top) I will have it working.

--

Hank van Cleef vancleef@netcom.com vancleef@tmn.com
The Union Institute History of Science and Technology

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 09:02:21 1994
Message-Id: <MAILQUEUE-101.941021081748.352@central.georcoll.on.ca>
From: RHALL <RHALL@central.georcoll.on.ca>
Date: Fri, 21 Oct 1994 04:17:48 -0400
Subject: subscribe

subscribe

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 18:48:52 1994
From: azoth@netcom.com (Az0th)
Message-Id: <199410212024.QAA19580@netcom.netcom.com>
Subject: Thanks, and now for something completely different...
Date: Fri, 21 Oct 1994 16:24:06 -0400 (EDT)

Greets!

Thanks to all who responded to my request for Star Roamer documents; I'd expect the little beast to be singing again by Thanksgiving, at least.

I've also just bought Paul Newland's R-4C, and am wondering what I shouldn't do to it. While my overall feeling is to leave it box-stock and intact, I can't help but wonder about the various and numerous mods dreamed up by Sherwood Eng's wizards. Has anyone here put together a gradient icing-to-butchery scale of the relative merits of the incremental upgrades devised for this already fine radio? Obviously, the less visible, non-feature-oriented improvements in IMD, THD, TOI, ultimate rejection and similar characteristics remain sensible even for someone

desirous of maintaining the integrity/collectibility of the equipment.

Or so I believe. ;) Comments welcome!

RF Buchanan

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 17:27:10 1994
Date: 21 Oct 94 16:19:58 EDT
From: don merz <71333.144@compuserve.com>
Subject: The Remains Of The Radio
Message-Id: <941021201957_71333.144_DHQ74-3@CompuServe.COM>

I need some help with an ethical dilemma. Suppose, hypothetically speaking, that one boatanchorite sells a radio to another boatanchorite. The radio arrives with hidden shipping damage. The shipper picks up the radio and is asked to pay a claim for the full purchase price of the radio. The shipper pays the claim to the seller. The seller of course, has had the buyer's money all this time. Now the seller has the shipper's money too and he refunds the purchase price to the buyer. (IS ANYONE STILL WITH ME HERE, OR HAVE YOU ALL MOVED ON...?)

THE QUESTION: Who should get to keep the remains of the radio (which, though damaged, is still usable)?

Consider this an unofficial boatanchor poll. I'll tabulate the responses and report back to you.

Thanks.

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 19:26:40 1994
From: "Mark Glusker" <glusk@mechcad3.esd.sgi.com>
Message-Id: <9410211429.ZM5994@mechcad3.esd.sgi.com>
Date: Fri, 21 Oct 1994 14:29:45 -0700
Subject: Re: The Remains Of The Radio

Don,

This all assumes I understood your post.

Let's say no one gets the radio. The buyer has not paid anything and has not received anything. The seller has given up his radio and has been paid a fair price for it. Basically, not such a bad situation.

The question is: who should get a damaged radio for free? If I had to choose, I would say the buyer should get the damaged radio. If you get your hopes up for a new (old) radio and it doesn't come through, that is very disappointing. On the other hand, if you sell a radio, you already

have decided you no longer want it. The loss of the radio in transit is more devastating to the buyer than the seller, so he should get whatever compensation is available.

Of course, if I were the buyer and I got the radio, I'd throw a few bucks the seller's way to spread the compensation around.

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 21:41:34 1994
Date: Fri, 21 Oct 94 23:34:58 UTC
Message-Id: <2640@ki5sl.ampr.org>
From: ki5sl@ki5sl.ampr.org (Rick_Blank)
Subject: Re: The Remains Of The Radio

In message <941021201957_71333.144_DHQ74-3@CompuServe.COM>
71333.144@compuserve.com writes:
> I need some help with an ethical dilemma. Suppose, hypothetically speaking,
> that one boatanchorite sells a radio to another boatanchorite. The radio
> arrives with hidden shipping damage. The shipper picks up the radio and
> is asked to pay a claim for the full purchase price of the radio. The
> shipper pays the claim to the seller. The seller of course, has had the buyer's
> money all this time. Now the seller has the shipper's money too and he refunds
> the purchase price to the buyer. (IS ANYONE STILL WITH ME HERE, OR HAVE YOU
> ALL MOVED ON...?)
>
> THE QUESTION: Who should get to keep the remains of the radio (which, though
> damaged, is still usable)?
>
> Consider this an unofficial boatanchor poll. I'll tabulate the responses
> and report back to you.
>
> Thanks.
>
>
>From what I have seen, the shipping company should keep the radio, they're the one that actually have paid the purchase price. In most merchandise transfers that I have seen out in the business world, these pieces are usually left at the buyers place and the selling party gets the insurance check. Then the buyer purchases the item from the original owner for a reduced price..ie..the buyer should get the radio back and a discount in the amount he has to pay for the rig...or, if the seller is a really great guy, he can just let it go, he's gotten his money out of the deal, which is probably the way I would go; as long as I am not out any money due to no fault of my own, I don't sweat it. The end user has to repair or live with the damage and is the one that is really hurt by the shipping company. Therefore, he's the one who

should benefit if only one party is to benefit from the insurance payment.

Just keep telling yourself:
This is only an opinion!
This is only an opinion!

Rick Blank, KI5SL
ki5sl@sat.ampr.org
2223 Blanco Road
San Antonio, Texas 78212
end

From owner-boatanchors@gnu.ai.mit.edu Fri Oct 21 03:34:07 1994
Date: Thu, 20 Oct 94 20:08:14 HST
From: jeffrey@math.hawaii.edu (Jeffrey Herman)
Message-Id: <9410210608.AA26180@kahuna.math.hawaii.edu>
Subject: TTY for free, Cheap tubes

Here's some more goodies from rec.radio.swap. // Jeff NH6IL

Article 16354 of rec.radio.swap:
>From: morris@grian.cps.altadena.ca.us (Mike Morris)
Subject: FREE: Teletype 28ASR & 28R0
Summary: Get it out of my shack...
Keywords: FREE RTTY TELETYPE

FOR TRADE, OR ????

One Model 28 ASR Teletype, complete.
Includes spare Model 28 R0 less cabinet
i.e. a spare printer mechanism with base.

The 28 ASR has a regular friction feed platen.
The 28 R0 is equipped with a pin feed platen,
vertical and horizontal tab kits (was used to print
airline tickets). If you really want it I have the
Teleticker (tm) control box - essentially a 300 baud
autoanswer modem with answerback and a loop current generator.

This unit has been in storage in the back of my garage for the last
5-6 years when the current owner moved from a house into an
apartment and asked if he could store it in my garage. I believe it

was working at that time. He has since lost interest in it, and told me to get rid of it. Manuals might be available - if any interest is shown, I will put the prospective buyer in touch with the current owner.

--

Mike Morris WA6ILQ | All opinions must be my own since nobody pays
PO Box 1130 | me enough to be their mouthpiece...
Arcadia, CA. 91077 |
ICBM: 34.12N, 118.02W | Reply to: morris@grian.cps.altadena.ca.us

Article 16380 of rec.radio.swap:

>From: mc@shore.net (Michael Crestohl)
Subject: FOR SALE: Goodie box of approx. 150 radio tubes \$25.00

A goodie box of radio tubes - over 150 - assorted 7 and 9 pin miniature receiving tubes like 6U8a, 12AU6, 6AU6, and many other numbers, including 4 6146s. Most are not in boxes (although some are in boxes appear to be new). No guarantees as to whether or not they are all good, but most appear to be "pulls" from radios that were scrapped for parts. These come from my friend's fathers basement and are for sale for \$25.00 which is about .165 each plus UPS. If interested please reply by e-mail.

Michael Crestohl KH6KD/W1
mc@shore.net